



Report to the Auburn City Council

Action Item

Agenda Item No. 11

City Manager Approval

To: Mayor and City Council Members
From: Bernie Schroeder, Director of Public Works
Megan Siren, Administrative Analyst (NS)
Date: January 10, 2011
Subject: Regional Wastewater Project Value Engineering Study – Request for Funding

The Issue

Shall the Council approve funding a portion of the Auburn Area Regional Sewer Project Value Engineering (VE) Study?

Conclusion and Recommendation

Staff recommends that the City Council, by RESOLUTION, authorize the Director of Public Works to execute the Memorandum of Understanding with Placer County and the City of Lincoln which will authorize the contribution of \$28,000 to the City of Lincoln for the City of Auburn's share of the Value Engineering Study.

The entire study costs are \$70,000. The study costs are split between Placer County (60%) and the City of Auburn (40%) in proportion to each area's wastewater flows.

Background

Over the past several years, the City Council has expressed interest in regionalizing its wastewater treatment and disposal system with others agencies in Placer County. The Council has committed resources and actively participates in the Placer Nevada Wastewater Authority (PNWA) formed to further this effort. Since 2004, the PNWA has successfully lobbied for and received 9 million dollars in grants from the US EPA and US Army Corps of Engineers for various wastewater regionalization projects in Placer County.

In 2008, preliminary budget numbers were developed for modifying the existing treatment plant site to include pumping facilities, constructing a regional transmission pipe to Lincoln, and expanding the Lincoln WWTP. Auburn's share of costs was estimated at \$83 million dollars. Due to the high estimate, the City decided to pursue a parallel course to upgrade the City of Auburn's WWTP to meet the National Pollutant Discharge Elimination System (NPDES) permit.

On August 23, 2010 the City Council authorized participation and payment of \$17,000 for the Value Engineering Study conducted by Brown & Caldwell as a partnership between the City of Auburn and Placer County to better refine the preliminary project costs that were developed in 2008. The work included geotechnical investigations and other cost refinements to reflect the current bidding climate. The study indicated that Auburn's share (assuming Placer County participation in some of the shared facilities) would be closer to \$46 million. These study results were presented to the

Placer Nevada Wastewater Authority (PNWA) in October; the Executive Summary is attached as Exhibit F.

While significantly lower than before (the \$83 million preliminary budget has been reduced to \$46 million), the PNWA Board and supporting staff continue to be concerned about the sewer rate impacts to finance the upfront costs for implementing a regional project. A \$42.1 - \$46.8 million project would require the City of Auburn to increase the monthly sewer service charges to fund the project. The monthly sewer service charges would need to be increased from \$56.25 per equivalent dwelling unit (EDU) to approximately \$108 - \$114 per EDU as shown in Exhibit E. These cost estimates are still planning level numbers and include contingencies to reflect uncertainties and unknowns. Better refinement of the numbers is typically completed after producing actual design drawings. For a project of this size, design would cost several million dollars.

Following the Brown & Caldwell Value Engineering Study, the City of Lincoln proposed conducting an additional Value Engineering Study to make a fixed cost offer to the City of Auburn and Placer County to design, finance, construct, own and operate the regional wastewater system. On October 28, 2010, the PNWA Board unanimously voted to request the Placer County Board of Supervisors and the Auburn City Council authorize payment of their share of expenditures for value engineering and cost refinement to the City of Lincoln.

The City of Lincoln is willing to undertake a Value Engineering (VE) Study to develop a monthly cost per dwelling unit to convey, treat and dispose of wastewater flows. The total VE study will cost \$70,000 with Placer County being requested to pay \$42,000 and the City of Auburn being request to pay \$28,000. At the end of the VE study conducted by the City of Lincoln, the City of Auburn will have a fixed cost per dwelling unit from the City of Lincoln to evaluate as show in Exhibit A. The attached Memorandum of Understanding (MOU) between the City of Auburn, Lincoln and Placer County defines the terms of the agreement and how the money would be spent and provided to the City of Lincoln. The MOU is attached as Exhibit B.

In reference to providing make-up water in the Auburn Ravine as it relates to the Regional Project, the issue has not been resolved. The make-up water issue is included in the City of Lincoln's VE study section analyzing the environmental review in Phase II of the study. The City of Auburn's options regarding making up water in the Auburn Ravine include PCWA, PG&E and NID who are in the process of FERC relicensing.

Staff recommends funding the Value Engineering Study by the City of Lincoln because it will determine the viability of the Regional Sewer Project for the City of Auburn. With the completion of the study, the City of Lincoln will provide a fixed cost for the completion of the Regional Sewer Project which includes design, finance and building the entire Regional Project Infrastructure, including expansion of the Lincoln Wastewater Treatment and Reclamation Facility, construction of approximately 18 miles of large diameter pipe, decommissioning the two existing treatment plants in the Auburn area, and construction of pump stations and storage ponds. This approach to the Regional Sewer Project enables the Council to have adequate information to determine the viability of the Regional Sewer Project for the City of Auburn.

The City of Lincoln received approval on November 9th from their Council to move forward with this approach if Placer County and the City of Auburn are willing contributors. The City of Lincoln selected Stantec Consulting Services to conduct the VE Study. The City of Lincoln's staff report is shown in Exhibit G. Placer County approved the MOU and the request for funding at the

November 23rd Board of Supervisors meeting with provisions that if the City of Auburn doesn't approve the MOU, then Placer County will be given a separate cost proposal. Placer County's staff report is shown in Exhibit H.

The PNWA Technical Advisory Committee (TAC) with the City of Lincoln has prepared the following schedule for the Value Engineering Study.

January 25, 2011	Final VE Study Completed
January 25, 2011	Board of Supervisors Presentation of Final VE Study
January 27, 2011	PNWA Board – Recommendation to Auburn and County
February 8, 2011	Lincoln Council Approval of Agreement/Offer
February 22, 2011	Board of Supervisors Presentation of Offer/Agreement (Accept/Reject)
February 28, 2011	City of Auburn Presentation of Offer/Agreement (Accept/Reject)

Alternatives Available to Council; Implications of Alternatives

1. Authorize the VE Study
2. Do not authorize the VE Study - The City could decide to not fund/ participate in the VE study. If so, the City of Lincoln will not provide the associated offer for the regional project and the City would likely continue to assume the project would cost on the order of \$46 million since this is the last estimated prepared.

Fiscal Impact

The \$28,000 would be from the Sewer Enterprise Funds. There are adequate funds to cover this study. A grant from the U.S. Army Corps of Engineers may reimburse 75% of the cost of the study.

Attachments: Exhibit A – City of Lincoln Conceptual Approach
Exhibit B - MOU with Placer County, City of Lincoln & City of Auburn
Exhibit C- Letter from PNWA Chair – Sewer System Regionalization
Exhibit D - Letter from PNWA Chair – Regionalization of Sewer Treatment Facilities
Exhibit E – Estimated Regional Sewer Rate Sheet
Exhibit F – VE Study Executive Summary
Exhibit G – City of Lincoln Staff Report
Exhibit H – Placer County Staff Report
Resolution

**City of Lincoln Conceptual Proposal
For Regional Sewer**

1. The City of Lincoln would design, finance and build the entire Regional Project infrastructure, including expansion of the Lincoln Wastewater Treatment and Reclamation Facility (WWTRF), construction of approximately 18 miles of large diameter pipe, decommissioning the two existing treatment plants in the Auburn area, and construction of pump stations and storage ponds.
2. Lincoln would establish separate estimated fixed costs to Auburn and SMD 1 for completion of the project.
3. The estimated fixed cost would include \$12.2 million compensation to Lincoln for prior oversizing of various components of their treatment plant and sewer interceptor.
4. If the actual cost of completing the project exceeds the estimated fixed cost by less than the oversizing reimbursement, Lincoln would absorb the excess cost. SMD 1 and Auburn would share in the cost of any overruns that exceed the oversizing reimbursement. If the actual project cost is less than the estimated fixed cost, Lincoln would retain the savings up to an agreed maximum.
5. Lincoln would own and operate the regional infrastructure in perpetuity.
6. Lincoln would establish an initial cost for operating the treatment plant and operating and maintaining the pipelines and pump stations. With the exception of CPI adjustments, they would hold this cost for five years. Beginning in the sixth year, they would adjust the fees as necessary to cover all reasonable costs.
7. Lincoln would establish connection fees as necessary to pay for all future facility expansions.
8. Lincoln will design, build and finance any future permit compliance projects. The cost of these projects will be shared by current and future customers proportionate to their expected use.
9. Lincoln would require Auburn and SMD 1 to make "significant efforts" to reduce Inflow and Infiltration of storm and ground water, and to ensure pre-treatment of industrial discharges.
10. \$4.0 million deposit required to start design needed by March 2011.
11. Auburn and SMD 1 to provide land needed for regional facilities at current treatment plants at no cost to Lincoln. County to provide existing Bickford sewer pipeline to Lincoln at no cost.
12. Lincoln to pay fines imposed on Auburn and SMD 1 if regional facilities are not operational according to schedule.
13. Lincoln would require cooperation of Auburn and County as they pursue State Revolving Fund loans to finance the project.

**Agreement Between
County of Placer, City of Lincoln and City of Auburn
Regional Wastewater Conveyance and Treatment Infrastructure**

Whereas, the County of Placer ("County"), City of Lincoln ("Lincoln"), and the City of Auburn ("Auburn"), (collectively known as the "Parties") share an interest in determining the feasibility and cost of constructing regional wastewater conveyance and treatment infrastructure ("Regional Project") which would provide cost effective wastewater treatment services to the residents of the County, Auburn and Lincoln, and

Whereas, in an effort to encourage both the City of Auburn and the County to pursue a Regional Project, the City of Lincoln has advanced the concept described in detail in Exhibit A which includes Lincoln development and ownership of the entire Regional Project Infrastructure with certain fixed and variable costs to the County and Auburn, and

Whereas, in order for Lincoln to prepare a final proposal to the County and Auburn for the Regional Project, additional value engineering needs to be completed along with more refined cost estimates for the regional wastewater conveyance system to carry wastewater from the County and Auburn to Lincoln, and

Whereas, Lincoln proposes to select and retain a consultant to perform \$70,000 of additional and necessary value engineering and cost refinement work described as Phase 1 of the Request for Proposal and summarized in Exhibit B, and

Whereas, the City of Auburn and the County believe that the Lincoln proposal has the potential to provide great benefit to their sewer customers, and

Whereas, Lincoln has agreed to administer the consultant work and prepare the final cost proposal utilizing their own staff resources, and

Whereas, the origin of sewage flow from the Auburn area is expected to approximate 60% from Sewer Maintenance District 1 and 40% from Auburn, which provides a fair basis for sharing the cost of performing the additional work, and

Whereas, Lincoln has expended millions of dollars to oversize sewage conveyance and treatment facilities for the Regional Project, and

Whereas, Corps of Engineers grant funds may be available to reimburse part of the funds paid by the County and Auburn under this agreement, and

Whereas, approval of this agreement by Auburn may be delayed due to an unexpected Council member absence.

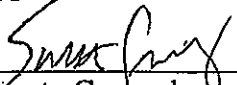
Now, therefore, the Parties agree as follow:


1. Lincoln will: a) select and retain a consultant to prepare additional and necessary value engineering and cost refinement work associated with the Regional Project conveyance system, b) transmit any draft and final work products from said consultant to Auburn and County, and c) prepare a formal offer to the County and Auburn to design, construct, own and operate the Regional Sewer Project conveyance and treatment facilities. Lincoln will use their best efforts to deliver a formal offer by the end of February 2011.
2. County will pay to Lincoln upon receipt of an invoice a total of \$42,000 as its share of the additional and necessary value engineering and cost refinement work for the Regional Project.
3. Auburn will pay to Lincoln upon receipt of an invoice a total of \$28,000 as its share of the additional and necessary value engineering and cost refinement work for the Regional Project.
4. Lincoln will return to County and Auburn any funds not expended to complete the scope of work.
5. In the event Auburn does not approve this agreement in November 2010, County and Lincoln will proceed as follows: Upon receipt of payment from County, Lincoln will authorize the selected consultant to proceed with the amount of funds paid by the County and if Auburn subsequently approves this agreement and pays their share, Lincoln will authorize the consultant to proceed with the amount paid by Auburn. If Auburn does not pay their \$28,000 share of the value engineering and cost refinement work for the Regional Project by January 15, 2011, then Lincoln may decide to only provide a formal offer to the County.

IN WITNESS WHEREOF, the parties have executed this Agreement on the date(s) shown below:

COUNTY OF PLACER

Approved as to form:


County Counsel



Kirk Uhler,
Chairman, Board of Supervisors

Date: 11/23/10

City of Auburn

Approved as to form:

City Attorney

Print Name:

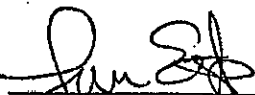
Title:

Date:

City of Lincoln

Approved as to form:

City Attorney



Jim Estep
City Manager

Date: 11/22/10

Exhibit A

**City of Lincoln
Conceptual Proposal for Regional Sewer**

1. The City of Lincoln would design, finance and build the entire Regional Project infrastructure, including expansion of the Lincoln Wastewater Treatment and Reclamation Facility (WWRTF), construction of approximately 18 miles of large diameter pipe, decommissioning the two existing treatment plants in the Auburn area, and construction of pump stations and storage ponds.
2. Lincoln would establish separate estimated fixed costs to Auburn and SMD 1 for completion of the project.
3. The estimated fixed cost would include a budget of \$12.2 million in compensation to Lincoln for prior oversizing of various components of its treatment plant and sewer interceptor.
4. If the actual cost of completing the project exceeds the estimated fixed cost by less than the oversizing reimbursement, Lincoln would absorb the excess cost. SMD 1 and Auburn would share in the cost of any overruns that exceed the oversizing reimbursement. If the actual project cost is less than the estimated fixed cost, Lincoln would retain the savings up to an agreed maximum.
5. Lincoln would own and operate the regional infrastructure in perpetuity.
6. Lincoln would establish an initial cost for operating the treatment plant and operating and maintaining the pipelines and pump stations. With the exception of CPI adjustments, they would hold this cost for five years. Beginning in the sixth year, they would adjust the fees as necessary to cover all reasonable costs.
7. Lincoln would establish connection fees as necessary to pay for all future facility expansions.
8. Lincoln will design, build and finance any future permit compliance projects. The cost of these projects will be shared by current and future customers proportionate to their expected use.
9. Lincoln would require Auburn and SMD 1 to make "significant efforts" to reduce Inflow and Infiltration of storm and ground water, and to ensure pre-treatment of industrial discharges.
10. \$4.0 million deposit required to start design needed by March 2011.
11. Auburn and SMD 1 to provide land needed for regional facilities at current treatment plants at no cost to Lincoln. County to provide existing Bickford sewer pipeline to Lincoln at no cost.
12. Lincoln to pay fines imposed on Auburn and SMD 1 if regional facilities are not operational according to the schedule to be included in Lincoln's proposal (currently expected to be the end of 2014).
13. Lincoln would require cooperation of Auburn and County as Lincoln completes design and environmental review, pursues State Revolving Fund loans to finance the project, completes construction and operates the facilities.

Exhibit B

City of Lincoln
Summary of Phase 1 Scope of Work
for Additional and Necessary Value Engineering and Cost Refinement Work
Associated with the Regional Sewer Project Conveyance System

Phase 1: Value Engineering and Cost Refinement. The Phase 1 scope of services will include preparation of a Value Engineering and Cost Refinement Analysis of the Mid-Western Placer Regional Sewer Project Conveyance Facilities. Value engineering includes analysis of all factors that affect the cost of the project over the life of the project. Value engineering of facilities must include analysis of the schedule for design and construction given the unique competitive bidding environment that exists at this time. The minimum goals of the Phase 1 project are:

- Provide further value engineering and cost refinement analysis of the regional sewer conveyance facilities including storage, pumps, force main, odor control and energy dissipation facilities. Specific areas to analyze further include:
 - Further definition of the nature of the rock along the alignment with a focus on impact on construction costs
 - Construction techniques for rock along the alignment and trench design alternatives that may reduce project costs
 - Storage options including using existing structures and minimizing the need for storage through design and operation
 - Alternative pipe material designs to increase competition and lower prices
 - Alignment options that may significantly reduce project costs
 - Phasing of pumps, storage, odor control and other facilities to minimize initial costs yet provide for cost effective expansion
 - Alternative creek crossing techniques that could reduce environmental and permitting requirements and construction costs
 - Options for reducing cost to project of completing Bickford pipe
 - Project estimates that move from budget estimates closer to actual bid pricing
 - Opportunities for cost savings made possible by one agency responsible for entire regional sewer project, design, construction and operation.
- Provide a firm basis of costs for proceeding with design and construction of the facilities within the current advantageous bid environment.

- Provide confirmation that project facilities can be designed and constructed with minimal environmental effects thereby avoiding lengthy federal environmental or permit approval.
- Provide confirmation of the overall project schedule.
- Provide a firm basis for the annual operation and maintenance costs for the conveyance facilities.

The following mandatory items must be included in the scope of work. The proposed scope of work is to be developed by the consultant; however the items listed must be clearly present as project tasks and/or milestones.

- Identify the project activities needed to address each of the project goals.
- Lead an informal value engineering workshop with the Technical Advisory Committee consisting of Placer County, City of Auburn and City of Lincoln.
- Work closely and openly with the City Engineer to complete project tasks
- Prepare a technical memorandum with the results of the value engineering and cost refinement work.
- Prepare two drafts, one internal draft and one administrative draft, and a final technical memo. The internal draft is to be subdivided into smaller sections for regular periodic reviews, rather than submitting the entire document for review all at once.
- Participate in four public agency meetings possibly including PNWA, Placer County, City of Auburn and City of Lincoln.
- Circulate and present the administrative draft to the TAC, receive and prepare responses to any comments.
- Attend regular project meetings with the City Engineer to review consultant's work and progress towards goals. Prepare summaries and action item lists for all meetings.
- Provide a prime contact for the City Engineer. Prime contact to be the main person communicating with the City Engineer and responding to project issues. This communication will include meetings, phone conversations and email communication.
- Provide 10 full color hard copies, one pdf copy, and an electronic copy of the final report. The electronic copy is to be in Word format, and shall include all tables, figures, exhibits, and databases in a format that will allow the City to access and manipulate the original information outside of the document.

**Placer-Nevada
Wastewater Authority**

Bill Kirby, Chair

~City of Auburn~

Orin Bennett, Executive Director

John Murdock
S.P.M.U.D.

Ed Sander
Newcastle Sanitary District

Kent Nakata
City of Lincoln

Robert Weygandt
Placer County

November 3, 2010

Mayor
City of Auburn
1225 Lincoln Way
Auburn, California 95603

Chairman of the Board
Placer County Board of Supervisors
County Administrative Center
175 Fulweiler Avenue
Auburn, California 95603

Subject: Sewer System Regionalization

Honorable Mayor and Honorable Chairman:

The Placer Nevada Wastewater Authority (PNWA) has performed extensive work to refine estimates of cost for constructing the infrastructure required to regionalize the Auburn area Wastewater Treatment Plant and disposal at the Lincoln Wastewater Treatment and Reclamation Facility (LWWTRF). Additional knowledge gained throughout this investigation has allowed risks associated with design and construction to be better understood resulting in confidence in reducing estimates of cost. As these estimates of cost are refined and hopefully reduced, regionalization becomes more affordable.

State and Federal Regulations for treatment and disposal of wastewater continue to be more and more difficult and costly to satisfy. Wastewater treatment facilities in the foothills of California, like the Auburn area wastewater treatment plants, often discharge to effluent-dominant water bodies. Frequent regulatory changes continue to make wastewater discharge requirements more difficult to meet, especially for small, foothill treatment plants discharging to sensitive waterways. It seems likely that the Placer County Sewer Maintenance District #1 (SMD #1), Wastewater Treatment Plant (Plant 1), and the City of Auburn Wastewater Treatment Plant (AWWTP) will be subject to extensive additional treatment requirements at each discharge permit renewal.

Although a regional wastewater treatment plant will be subject to similar regulatory changes, meeting those requirements at a regional facility is much less burdensome. The LWWTRF has many advantages over smaller foothill facilities including:

- significant land area for additional facilities;
- original construction which easily allows for expansion at reduced costs;
- multiple discharge options which include land disposal, agricultural reuse, recycled water use, and stream discharge; and
- extensive storage to better regulate heavy wintertime flows.

If SMD #1 and AWWTP continue in operation now, the option for regionalization will most likely not be available in the future. As a result, the regulatory requirements placed upon those facilities will only be met by expending the extensive cost to upgrade, revise, or completely rebuild the treatment processes.

The opportunity to develop a regional wastewater system is upon the Auburn area. The PNWA strongly encourages both the Placer County Board of Supervisors and the Auburn City Council to consider regionalization as the preferred approach to achieving compliance with State and Federal wastewater treatment and disposal regulations.

Sincerely,

A handwritten signature in black ink, appearing to be 'Dr. William Kirby', written over a horizontal line.

Dr. William Kirby
Chair, Placer Nevada Wastewater Authority

ONB:jg

**Placer-Nevada
Wastewater Authority**

Bill Kirby, Chair

~City of Auburn~

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Robert Weygandt
Placer County

November 3, 2010

Mayor
City of Auburn
1225 Lincoln Way
Auburn, California 95603

Chairman of the Board
Placer County Board of Supervisors
County Administrative Center
175 Fulweiler Avenue
Auburn, California 95603

Subject: Regionalization of Sewer Treatment Facilities

Honorable Mayor and Honorable Chairman:

The Placer Nevada Wastewater Authority (PNWA) has been working diligently to determine a more accurate estimated cost to construct facilities to transport wastewater from Placer County (Sewer Maintenance District #1 - SMD #1) and from the City of Auburn Wastewater Treatment Plants to the City of Lincoln for treatment and disposal.

The City of Lincoln has proposed to Placer County and to the City of Auburn an approach whereby the City of Lincoln would design, finance, construct, own, operate, and maintain the facilities that will transport, treat, and dispose of wastewater for both SMD #1 and the City of Auburn.

The City of Lincoln is willing to undertake development of a monthly cost per dwelling unit to convey, treat, and dispose of wastewater flows. Repayment of the Capital Cost of the facilities will be fixed for twenty years. Operation and Maintenance costs will be fixed for five years (adjusted only for the consumer price index). If authorized to proceed, the City of Lincoln will begin design March 2011 and complete construction prior to December 2014.

To develop that fixed cost, the City of Lincoln must perform additional value engineering and cost refinement and will do that for a fixed cost of \$70,000. The cost to Placer County would be \$42,000 and the cost to the City of Auburn would be \$28,000.

At the October 28, 2010 Placer Nevada Wastewater Authority meeting, the Board unanimously voted to request the Placer County Board of Supervisors and the Auburn City Council to authorize payment of their share of these expenditures for value engineering and cost refinement to allow the City of Lincoln to present a fixed cost to design, finance, construct, own, and operate the regional wastewater system.

Sincerely,

A handwritten signature in black ink, appearing to be 'Dr. William Kirby', written over a horizontal line.

Dr. William Kirby
Chair, Placer Nevada Wastewater Authority

ONB:jg

**City of Auburn Regional Wastewater Study
Updated Capital Cost and Rate Estimate Reflecting Recent Estimates (October 2010)**

	Monthly Debt Service/O&M Estimates in \$ per month per EDU			
	EXISTING CONDITIONS		VE Work Just Completed	
Collection System O&M / Rehab Projects/ Admin	\$20.44	Current Sewer Budget	\$20.44	Unchanged
Old Debt Service from Past Upgrades	\$4.30	Retired in 2019	\$4.30	Unchanged, but retired in 2019
Contract Operations of WWTP (Labor, Chemicals, Power)	\$23.48	CH2M HILL Contract (WWTP only)	--	To Lincoln
Financing of Recent Upgrades	\$8.02	Estimated based on \$7.5 M total loan package	\$8.02	Unchanged
Regional Pipelines and Pump Stations			45- 51	Debt Service on \$42.1 to \$46.8 million capital
Lincoln WWTRF O&M			\$24.24	\$1,600,000 per year
Regional Pipeline O&M			\$6.06	\$400,000 per year
TOTAL MONTHLY RATE	\$56.25	per month per single family home	\$108 - \$114	per month per single family home

City of Auburn Regional Wastewater Study
Updated Capital Cost and Rate Estimate Reflecting Lincoln Fixed Price Concept

	Monthly Debt Service/O&M Estimates in \$ per month per EDU			
	EXISTING CONDITIONS		Lincoln Fixed Price	
Collection System O&M / Rehab Projects/ Admin	\$20.44	Current Sewer Budget	\$20.44	Unchanged
Old Debt Service from Past Upgrades	\$4.30	Retired in 2019	\$4.30	Unchanged, but retired in 2019
Contract Operations of WWTP (Labor, Chemicals, Power)	\$23.48	CH2M HILL Contract (WWTP only)	--	To Lincoln
Financing of Recent Upgrades	\$8.02	Estimated based on \$7.5 M total loan package	\$8.02	Unchanged
Regional Pipelines and Pump Stations			\$30 - 40 ?	Numbers to be determined after Lincoln Study
Lincoln WWTRF Upgrades & Reimbursements				
Lincoln WWTRF O&M			\$20- 30 ?	Numbers to be determined after Lincoln Study
Regional Pipeline O&M				
TOTAL MONTHLY RATE	\$56.25	per month per single family home	\$80 - 100 ??	per month per single family home

Executive Summary

The goal of the Auburn Area Regional Sewer Project - Value Engineering is to provide updated conceptual level cost estimates for the Auburn Area Regional Sewer Project (Regional Project) that reflect the current (2010) construction bidding conditions. The scope included additional engineering investigations to refine specific assumptions made during previous estimates that significantly impact the estimated construction costs. This executive summary provides an overview of the previous estimates prepared in 2008 and the process that was used to refine these estimates, along with a summary of the results.

Summary of 2008 Regional Project Cost Estimates

In 2008 a Technical Advisory Committee (TAC) began meeting to develop a conceptual description of the Regional Project. The TAC was also tasked with developing budgetary cost estimates that could be provided to the Placer Nevada Wastewater Authority (PNWA) as input to the decision whether to continue with the Regional Project or to proceed with upgrades to meet regulatory requirements at the existing facilities. The results of the TAC's efforts were summarized in the PNWA Report of Findings for Regional Sewer Facilities in Lincoln. The document provided estimates for capital construction costs of the project and annual operations and maintenance (O&M) costs. Estimates were prepared by contractors as a "mock bid" without the benefit of engineering design documents or specifications. Without the information provided in a detailed design, the estimate was based on many assumptions regarding the construction conditions. To provide a range of probable costs, two estimates were prepared for a single alignment alternative referred to as Option One (also referred to as the "Baxter Grade Road" alignment). The "best-case" scenario used a set of assumptions that would result in the lower boundary for construction costs, while the "worst-case" scenario used a more conservative set of assumptions resulting in the upper boundary. Cost estimates were also prepared by Eco:Logic for the expansion of the Lincoln Wastewater Treatment and Reclamation Facility (WWTRF) to accommodate the increase in capacity required for the Regional Project, as well as reimbursement to the City of Lincoln for existing facilities that were previously oversized in anticipation of the Regional Project. The results of the 2008 Regional Project estimates without any offsets for funding are provided in Table ES-1.

Table ES-1. Summary of Costs for Regional Project Without Funding

Item	"Worst Case" Regional Project Cost	"Best Case" Regional Project Cost
Conveyance and WWTP Abandonment	\$140,700,000	\$94,300,000
WWTRF Expansion	\$58,300,000	
Reimbursements to Lincoln	\$10,000,000	
Total	\$209,000,000	\$162,600,000

An estimate of the annual O&M costs for the Regional Project were also estimated for the "worst case" assumptions at \$2.1M per year, not including O&M costs for the Lincoln WWTRF. Estimated annual O&M costs for the WWTRF were not provided in the Report of Findings.

Regional Project Value Engineering & Cost Estimating Process

In August 2010, the TAC began weekly meetings to revisit the estimated costs for the Regional Project to reflect changes in the current bidding climate and refined assumptions. Three Technical Memoranda (TMs) were prepared, along with a limited geotechnical investigation, to refine the project costs. The TMs had the following purposes:

TM 1: Single versus Dual Pipelines. To better analyze the hydraulics of the Regional Project to determine if a single pipeline would be feasible across the range of flows from current conditions through buildout.

TM 2: Lincoln WWTRF Expansion Costs. To update the WWTRF Phase 2 expansion and Lincoln oversizing cost estimates, to provide estimates of O&M costs, and to provide an estimate of future expansion costs per gallon.

TM 3: Regional Project Costs. To incorporate the results of TM 1 and 2 into an estimate of overall project costs for four different project options. The pipeline alignments associated with the four project options are provided in Figure ES-1, below.

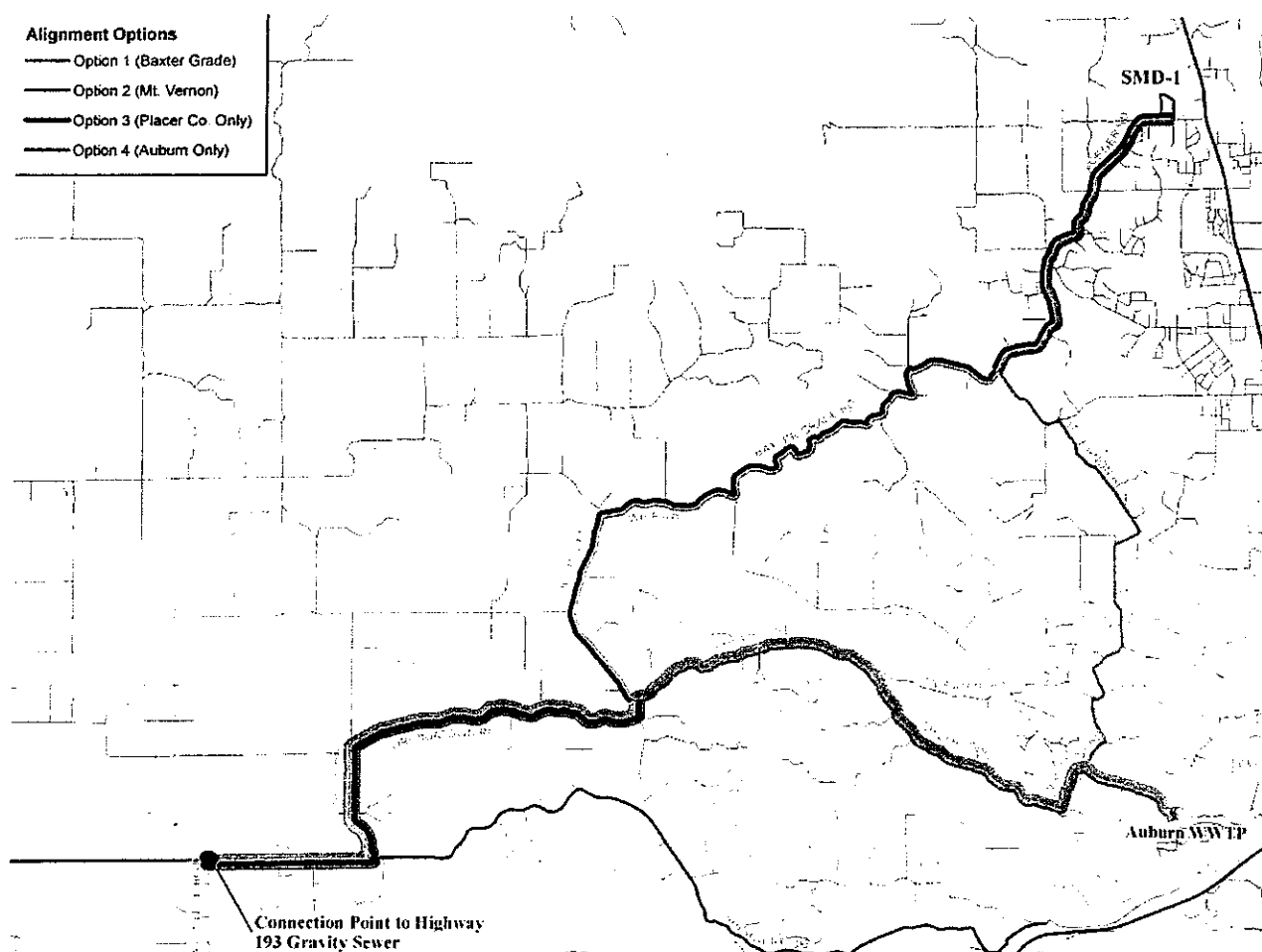


Figure ES-1. Alignment Options Used to Generate Regional Project Cost Estimates

Each of the TMs went through a rigorous peer review provided by a consulting engineering firm, as well as review by each of the TAC representatives, before a final version was submitted. Review comments and findings were discussed in TAC meetings in the attempt to reach consensus on conclusions.

Results of Regional Project Value Engineering & Cost Estimating

Engineering analysis performed during the development of each of the TMs, and from the results of a limited field investigation of the geotechnical conditions, allowed for revision of several assumptions from the previous 2008 cost estimates. A list of the major revisions is provided in Table ES-2.

Table ES-2. Cost Estimate Assumptions Revised During Value Engineering

Assumption Description	2008 "Worst Case"	2008 "Best Case"	2010 Value Engineering
Dual or Single Force Main Pipe	Dual	Single	Single
Volume of Hard Rock	50%	50%	< 30%
Road Repair (Minor Roads)	Replace complete road	Replace single-lane	Repair trench and slurry seal
Road Repair (Major Roads)	Replace half of road	Replace complete lane	Repair trench and overlay lane
Restrained Pipe Connections	100%	100%	80%
Emergency Storage	None	None	10 MG (SMD 1)
Demolition of Existing Plant	Minimal	None	Complete Demo (SMD 1)
Escalation to Midpoint of Construction	5% for 4 years	3% for 4 years	1% for 3 years
Status of Highway 193 Gravity Sewer	Complete	Complete	Requires 4,000 feet of pipe

In addition to the assumptions made above, current costs for construction materials, labor and subcontractor rates, and contractor profit are less than those expected in 2008, resulting in a lower overall estimated cost. It is important to note that the construction costs prepared and presented in TM 3 reflect the current 2010 bidding climate, and do not account for future fluctuations in construction bid costs. The resulting overall Regional Project costs are presented in Table ES-3.

Table ES-3. Summary of Regional Project Costs

Item	Option One (Baxter Grade) ¹		Option Two (Mt. Vernon) ¹		Option Three (Placer only) ¹	Option Four (Auburn Only) ¹
	Placer ²	Auburn ³	Placer ²	Auburn ³		
Conveyance and WWTP Abandonment	\$52.8	\$22.3	\$67.1	\$17.6	\$53.6	\$26.4
WWTRF Expansion	\$27.8	\$17.2	\$27.8	\$17.2	\$29.4	\$23.7
Reimbursement to Lincoln ⁴	\$9.3	\$5.8	\$9.3	\$5.8	\$9.3	\$5.9
Highway 193 Gravity Pipeline Completion	\$2.4	\$1.5	\$2.4	\$1.5	\$3.9	\$3.9
Total Capital Costs	\$92.5	\$46.8	\$106.8	\$42.1	\$96.2	\$59.9
Annual O&M Costs – Regional Pipeline	\$1.0	\$0.6	\$1.4	\$0.4	\$0.9	\$0.6
Annual O&M Costs – Lincoln WWTRF	\$2.1	\$1.6	\$2.1	\$1.6	\$2.3	\$1.8

¹ All costs are presented in multiples of \$1,000,000

² Cost sharing based on 63% of Regional Project Capacity

³ Cost sharing based on 37% of Regional Project Capacity

⁴ Includes \$2.9M for effluent basin reimbursement.

Engineering investigation into specific assumptions from the 2008 Report of Findings resulted in reductions of the estimates for the Regional Project Option One capital costs from \$24M to \$70M for the "best case" and "worst case", respectively. Annual operations costs for the Regional Pipeline were also reduced by approximately \$0.5M from the 2008 "worst case" estimate.

**MEMORANDUM**

TO: City Council

FROM: Jim Estep, City Manager

PREPARED BY: Bruce Burnworth, P.E., City Engineer

REVIEWED BY: Rod Campbell, Development Services Director

FINANCE REVIEW: Anna Jatczak, Assistant City Manager/CFO

DATE: November 9, 2010

ITEM: Adopt a resolution authorizing the City Manager to negotiate and execute agreements with the City of Auburn, Placer County and a Consultant to be selected by the City Manager to provide Value Engineering & Refined Cost Estimates for the Regional Sewer Project with the \$70,000 cost paid by City of Auburn and Placer County

RESOLUTION: Yes

ORDINANCE: N/A

RECOMMENDATION:

Staff recommends the City Council adopt a resolution authorizing the City Manager to negotiate and execute agreements with the City of Auburn, Placer County and a Consultant to be selected by the City Manager to provide Value Engineering & Refined Cost Estimates for the Regional Sewer Project with the \$70,000 cost paid by City of Auburn and Placer County.

BACKGROUND/ANALYSIS:

For more than ten years, the City of Lincoln has been cooperating with various agencies in the County with the goal of implementing a regional solution to wastewater treatment. Past actions by the City related to the regional sewer project included:

- Joining the Placer-Nevada Wastewater Authority (PNWA);
- Support for obtaining grant funds for regional sewer;
- Oversizing the City Wastewater Treatment and Reclamation Facility (WWTRF) to accommodate flows from the City of Auburn and Placer County Sewer Management District #1 (SMD1);

6.3D



- Oversizing the sewer main across Lincoln in anticipation of the regional sewer project; and
- Participating in numerous PNWA meetings as well as numerous Technical Advisory Committee (TAC) meetings.

The latest effort toward the regional sewer project included the preparation of three technical memorandums that addressed key cost issues associated with the feasibility and cost effectiveness of the regional approach. City staff, as well as staff from Placer County and Auburn, worked closely with consultants to develop these reports. The reports went a long way to resolving many cost issues. However, additional value engineering and cost refinement is needed to more conclusively answer questions related to costs. In addition the costs defined in the technical memorandums, while lower than the costs defined in 2008, still appeared too high compared to expanding current wastewater treatment plants in the County and at the City of Auburn. The regional project, while worthwhile for environmental reasons, appeared to be infeasible due to high costs.

Late in October City staff and two Council members, that have participated in the PNWA meetings for many years, met and concluded that having one agency design, finance, build and operate the regional sewer facilities would provide the greatest economies of scale. The savings appeared likely to be sufficient to make the regional project compare favorably to the local individual treatment plants. It appeared that further cost reductions could allow the City to recover some of the funds invested in the oversizing for the regional project. With the City's past investment in the regional sewer facilities, it appeared most logical to have the City be the single agency to design, own, build and operate the regional sewer facilities. To address concerns regarding ongoing delays associated with the project and possible increases in costs, the City Council members that have served on the PNWA Board and City staff explored the feasibility of the City making a fixed cost offer to Auburn and Placer County to design, build, own and operate all regional facilities from the existing SMD1 and Auburn treatment plants to the Lincoln WWTRF. Analysis indicated this could be good for the City of Lincoln as a way to recover some of the investment in oversizing and to benefit from economies of scale associated with a regional wastewater treatment facility.

Attachment A was initially prepared and presented at the October 28, 2010 PNWA Board meeting. It was subsequently updated following the PNWA Board meeting and a Technical Advisory Committee meeting (TAC). After an extensive discussion with many questions and answers, the PNWA Board unanimously approved the concept and recommended that the City of Auburn and Placer County fund the additional \$70,000 consultant effort needed to confirm additional value engineering approaches made possible by having a single agency design, build and operate all of the regional facilities. This additional effort will also provide the information needed for the City of Lincoln to make a firm offer to Auburn and Placer County. See letters from the PNWA Board in Attachment B.



To select a consultant for this regional sewer project work, the City selected three consultants from a list of 63 consultants that submitted Statements of Qualifications to the City in June of 2010. These consultants had expressed their interest in performing a variety of consulting work for the City over the next three years. The three short listed firms were selected as the firms that were best qualified to perform the regional sewer project work. Following the PNWA endorsement of the Lincoln proposed approach, a request for proposals was prepared and distributed on November 1, 2010. To move the project along quickly, if the County and Auburn decide to pursue the Lincoln proposal, the selection process addressed both the initial value engineering as well as project design, environmental, right of way, financing and permitting assistance to the City. The RFP is provided in Attachment C.

This RFP was sent to the following three consultants that have extensive experience providing professional services associated with large wastewater facilities (listed in alphabetical order):

CH2MHill
ECO:LOGIC-Stantec
West Yost Associates

Proposals are scheduled to be received on November 15, 2010. To expedite the required approvals by Lincoln, Auburn and the County and given the limited number of City Council meetings scheduled for November and December, Council is being asked to authorize the City Manager to negotiate and execute agreements with the City of Auburn, Placer County and the yet to be selected Consultant to provide Value Engineering & Refined Cost Estimates for the Regional Sewer Project with the \$70,000 cost paid by the City of Auburn and Placer County. The consultant's scope of work will include additional value engineering and confirmation of the project scope, cost and schedule.

The agreement with the consultant to be selected by the City Manager would have a not to exceed dollar amount of \$70,000 with the scope based on the scope set forth in the RFP (Phase 1). The process to select a consultant will include input from the City of Auburn and Placer County staff with the City Manager making the final decision. The notice to proceed to the consultant for Phase 1 would not be issued until Placer County and Auburn have agreed to pay the cost of the consultant work. PHASES 2 and 3 would only be brought back to the Council for consideration after Council makes a formal offer to Placer County and Auburn and such an offer is accepted (scheduled for February 2011).

Attachment D is a draft of the proposed agreement with the City of Auburn and Placer County. Attachment E is a draft of the Professional Services Agreement. The City Manager will negotiate revisions to the Placer County/Auburn and consultant agreements keeping intact the \$70,000 amount and that Auburn and Placer County will pay the \$70,000 cost.



OPTIONS:

The City Council may take the following action.

1. Adopt a resolution authorizing the City Manager to negotiate and execute agreements with the City of Auburn, Placer County and a Consultant to be selected by the City Manager to provide Value Engineering & Refined Cost Estimates for the Regional Sewer Project with the \$70,000 cost paid by City of Auburn and Placer County.
2. Provide staff with additional direction.

FISCAL IMPACT:

These services will be funded by the City of Auburn and Placer County. Proceeding with this work will allow the City to make a firm offer for design, construction and operation of the regional sewer facilities. The City of Lincoln would benefit from reimbursement for facilities oversized for the regional project as well as economies of scale associated with a larger treatment plant. The oversizing was paid for through the City development fee and wastewater funds so all financial benefits associated with the City participation in the regional sewer project will accrue to the wastewater developer fee program and the wastewater user rates.

STRATEGIC PLAN ACTION ITEM: N/A

RELATED ACTIONS: N/A

RESOLUTION NO. 2010-

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LINCOLN AUTHORIZING THE CITY MANAGER TO NEGOTIATE AND EXECUTE AGREEMENTS WITH THE CITY OF AUBURN, PLACER COUNTY AND A CONSULTANT TO PROVIDE VALUE ENGINEERING AND REFINED COST ESTIMATES FOR THE REGIONAL SEWER PROJECT WITH THE \$70,000 COST PAID BY CITY OF AUBURN AND PLACER COUNTY.

WHEREAS, the City wastewater development fee program and wastewater user rates will benefit from the City proposal to design, build, own and operate the proposed regional sewer facilities; and

WHEREAS, the Placer-Nevada Wastewater Authority has unanimously endorsed the Lincoln proposed approach to implementing the regional sewer project; and

WHEREAS, a request for qualifications was distributed, 63 statements of qualifications were received, requests for proposals were sent to three short-listed firms, proposals are to be received by the City from the consultants at 3:00 pm on Monday, November 15, 2010 with a consultant selection anticipated by November 19, 2010; and

WHEREAS, the notice to proceed with the consultant work will not be issued until agreements with Placer County and the City of Auburn are in place to pay for the consultant work.

NOW, THEREFORE BE IT RESOLVED, that the City Council of the City of Lincoln does hereby authorize the City Manager to negotiate and execute agreements with the City of Auburn, Placer County and a Consultant to provide Value Engineering & Refined Cost Estimates for the Regional Sewer Project with the \$70,000 cost paid by City of Auburn and Placer County.

PASSED AND ADOPTED this 9th day of November, 2010, by the following roll call vote.

AYES: COUNCILMEMBERS:

NOES: COUNCILMEMBERS:

ABSENT: COUNCILMEMBERS:

Tom Cosgrove, Mayor

ATTEST:

Patricia Avila, City Clerk

Attachment A

Mid-Western Placer Regional Sewer City of Lincoln Conceptual Proposal

Benefits to City of Auburn and Placer County SMD1:

1. Moving forward quickly to take advantage of the cost savings associated with the **current bidding environment**
2. Moving forward quickly to put an **end to fines** being charged for discharges to creeks that do not meet regulatory standards
3. Cost savings and speed associated with having **one agency responsible for the design, construction and operation** of all regional facilities
4. **Fixed known costs** for Auburn and SMD#1

Benefits to Lincoln:

1. Some level of **reimbursement for over-sizing costs** incurred for regional project (to be used for gravity sewer, elimination of lift stations, sewer main replacement, future treatment plant expansions)
2. Lincoln **shares economies of scale** with Auburn and SMD#1

Concept:

- a. Lincoln to **design, finance, build, own and operate all of the regional facilities including storage, lift stations, pipelines and treatment at a fixed cost.**
- b. **Capital repayment fixed for life of loan** (if SRF loan then 2.7% for 20 years)
\$____/EDU/Month
- c. **Monthly O&M component rates fixed except for CPI adjustments for first 5 years**
- \$____/EDU/Month
- d. **Fixed fees to be provided following completion of \$70,000 additional VE and cost estimating** funded by Placer County and Auburn with possible COE reimbursement. Fees specific to each agency based on necessary facilities.
- e. Deposits for design in March 2011 and **construction complete prior to end of 2014** (expected completion in 2013)
- f. Lincoln to budget oversizing reimbursement at the currently proposed level (~\$13M). If costs for the regional project are higher than the fixed cost, then Lincoln would get less reimbursement. This functions as a built-in project contingency. If the costs are lower, then Lincoln would get more reimbursement up to an agreed upon maximum. Savings that resulted in a reimbursement over this maximum would be shared with Auburn and SMD#1 through reduced rates
- g. After 5 years O&M component rates based on Lincoln treatment rates (total treatment O&M divided by total EDUs) plus reasonable regional pipeline component based on actual costs with a set overhead rate. Lincoln to review budgets, contracts, etc. with TAC.
- h. Connection charges for additional EDUs paid to Lincoln for expansions – updated every 3 to 5 years – Lincoln to set these connection charges to pay for all facility expansions. Estimates of connection charges to be provided along with fixed cost proposal.
- i. Costs will be determined separately for Auburn and SMD1. Costs will be a function of facilities needed and used. Hopefully we can avoid having to generate a separate set of dollar amounts for each agency participating alone – we expect that both agencies will want

to take advantage of the low costs.

- j. Assumes no change in regulations – impact of new regulations to be addressed with appropriate separate \$/EDU/Month charges shared by all affected users.
- k. All numbers in today's dollars
- l. If extraordinary events beyond Lincoln's control result in cost increases so that Lincoln receives no over sizing reimbursement, the regional sewer agreement will include provisions for insurance and sharing of risk among participating agencies. Lincoln would absorb higher costs by reducing the oversizing reimbursement first and then after that is exhausted; the costs beyond our control would be shared by Auburn and the County. Builder's All Risk insurance would help reduce risks.
- m. Requires Auburn and SMD#1 to make significant efforts to reduce I&I. Specified levels of effort would be required of both SMD#1 and Auburn. These levels of effort would include flow monitoring throughout the collection system, systematic efforts to reduce I&I and minimum dollar amounts spent annually for reducing I&I. We need to understand what each agency has planned and what they are willing to commit to do. Maybe \$600,000 a year spent on I&I reduction. Maybe Lincoln could charge a higher fee (surcharge) for higher wet weather flow rates above the 2.5 factor as one tool to address I&I. In the initial years the facilities can handle higher I&I. As base flows increase, high I&I will be a problem. More storage could be included in the connection charge in case I&I cannot be addressed (the storage is not needed until flow increases due to development).
- n. Requires Auburn and SMD#1 to implement appropriate controls over dischargers including requiring pre-treatment as necessary to address unusual concentrations of sewage flow constituents
- o. Deposits for design in March 2011 and construction complete prior to end of 2014
- p. Initial deposits to allow quick start of design ~\$2 million for City of Auburn and ~\$3.3 for SMD#1 with Lincoln financing of balance through SRF or other instrument.
- q. If not operational by the end of 2014 fines after 2014 for SMD1 and Auburn treatment plant normal discharges will be deducted from payments to Lincoln. **This is based on a project schedule that will require the strong support of the City of Auburn and Placer County throughout environmental review, financing, permitting, design, construction and operation at both the staff and elected officials level.**
- r. Auburn and SMD1 to provide land needed for regional facilities at existing plant sites for \$1/year or transfer to Lincoln for regional sewer use for \$1
- s. SMD#1 to transfer existing sewer line in SR 193 to Lincoln for \$1
- t. Auburn and SMD#1 will need to cooperate in Lincoln financing with information and rate coverage requirements.
- u. Governance: Auburn and SMD#1 will contract with Lincoln for regional sewer service. Lincoln to review design, construction and operational matters with TAC which will provide technical input. Joint meetings of appointed elected officials from each agency will provide policy input.

Regional Sewer City of Lincoln Proposal

Approach to Deliver Project at Fixed Cost

1. Oversizing reimbursement varies ~\$13 budgeted. Provides unique ability to fix costs
2. Scope management to control costs
 - a) Minimum capacity needed to meet current flow rates where cost effective – For example:
 - Pump sizing
 - Storage sizing
 - Treatment plant component sizing
 - b) Future expansion paid for through connection fees
3. Value engineering. Evaluate alternative designs to provide best value
4. Approach to bidding
 - a) Alternative pipe materials
 - b) Timely design and construction to benefit from the current discounted construction market.
5. Approach to environmental
 - a) Design to avoid environmental impacts and therefore costly and lengthy environmental issues (e.g., stay in roads, bridge over creeks or tunnel beneath – no open cut in the riparian zones.)
 - b) Environmental review in parallel with start of design as an integral part of design with an early focus on decisions that affect environmental review.
6. Control operations costs through contract operations
7. County and Auburn to pursue creek water replacement during low flow, critical conditions directly – not part of offer. The environmental review of this issue would be addressed in the Lincoln environmental process. The worst case is that water from NID or PCWA is discharged into the creek to replace the reclaimed water from the existing plants. We have some ideas on how to address this and we can discuss this further. We can even talk about Lincoln taking on this responsibility after we have more information.

Financing: SRF, Bonds or Private Funding – most likely SRF

1. SRF loan(s) and other loan instruments would fund completion of design and all of construction after \$5.3 million in design deposits.
2. Lincoln oversizing payment can't come from SRF so Lincoln would finance and/or obtain larger SRF loan for other Lincoln wastewater facilities to be repaid with payments for oversizing reimbursement.

Regional Sewer City of Lincoln Proposal

Schedule

- 10-28-10 PNWA Board Meeting – Expression of support for Lincoln Fixed Cost Approach
- 11-1-10 Lincoln RFP to three firms on SOQ list – Prime consultant with subconsultants
VE Analysis & solid value cost estimate (\$70,000 fee)
Regional pipeline and treatment plant design
Local facilities funded with oversizing reimbursement
- 11-9-10 Lincoln Council to authorize City Manager to execute agreements with Auburn, SMD1 and consultant for \$70,000 VE and Cost Estimating needed to provide a fixed cost proposal
- 11-15-10 Consultant VE and Cost Estimating Proposals due to Lincoln
- 11-22-10 Auburn Council to authorize execution of agreement with Lincoln and payment of \$28,000 for Lincoln VE and Cost Estimating needed for fixed cost proposal
- 11-23-10 Placer Board of Supervisors to authorize execution of agreement with Lincoln and payment of \$42,000 for Lincoln VE and Cost Estimating needed for fixed cost proposal
- 11-24-10 Start VE analysis
- 1-25-11 Final VE Report
- 2-8-11 Formal fixed price offer approved by Lincoln Council and authorization to enter into agreement with Auburn and Placer county re Regional Sewer design, construction, ownership, and operation. Authorization to start design subject to Auburn and County payments
- 2-22-11 Placer Board of Supervisors to authorize execution of agreement with Lincoln and payment for design
- 2-28-11 Auburn Council to authorize execution of agreement with Lincoln and payment for design
- 3-1-11 Start design subject to Auburn and County payments for design

November 1, 2010 DRAFT

ATTACHMENT B

**Placer-Nevada
Wastewater Authority**

Bill Kirby, Chair

~City of Auburn~

Orin Bennett, Executive Director

John Murdock
S.P.M.U.D.

Ed Sander
Newcastle Sanitary District

Kent Nakata
City of Lincoln

Robert Weygandt
Placer County

November 3, 2010

Mayor
City of Auburn
1225 Lincoln Way
Auburn, California 95603

Chairman of the Board
Placer County Board of Supervisors
County Administrative Center
175 Fulweiler Avenue
Auburn, California 95603

Subject: Regionalization of Sewer Treatment Facilities

Honorable Mayor and Honorable Chairman:

The Placer Nevada Wastewater Authority (PNWA) has been working diligently to determine a more accurate estimated cost to construct facilities to transport wastewater from Placer County (Sewer Maintenance District #1 - SMD #1) and from the City of Auburn Wastewater Treatment Plants to the City of Lincoln for treatment and disposal.

The City of Lincoln has proposed to Placer County and to the City of Auburn an approach whereby the City of Lincoln would design, finance, construct, own, operate, and maintain the facilities that will transport, treat, and dispose of wastewater for both SMD #1 and the City of Auburn.

The City of Lincoln is willing to undertake development of a monthly cost per dwelling unit to convey, treat, and dispose of wastewater flows. Repayment of the Capital Cost of the facilities will be fixed for twenty years. Operation and Maintenance costs will be fixed for five years (adjusted only for the consumer price index). If authorized to proceed, the City of Lincoln will begin design March 2011 and complete construction prior to December 2014.

To develop that fixed cost, the City of Lincoln must perform additional value engineering and cost refinement and will do that for a fixed cost of \$70,000. The cost to Placer County would be \$42,000 and the cost to the City of Auburn would be \$28,000.

At the October 28, 2010 Placer Nevada Wastewater Authority meeting, the Board unanimously voted to request the Placer County Board of Supervisors and the Auburn City Council to authorize payment of their share of these expenditures for value engineering and cost refinement to allow the City of Lincoln to present a fixed cost to design, finance, construct, own, and operate the regional wastewater system.

Sincerely,

A handwritten signature in black ink, appearing to be "Dr. Kirby", is written over a horizontal line.

Dr. William Kirby
Chair, Placer Nevada Wastewater Authority

ONB:jg

**Placer-Nevada
Wastewater Authority**

Bill Kirby, Chair

~City of Auburn~

Orin Bennett, Executive Director

John Murdock
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November 3, 2010

Mayor
City of Auburn
1225 Lincoln Way
Auburn, California 95603

Chairman of the Board
Placer County Board of Supervisors
County Administrative Center
175 Fulweiler Avenue
Auburn, California 95603

Subject: Sewer System Regionalization

Honorable Mayor and Honorable Chairman:

The Placer Nevada Wastewater Authority (PNWA) has performed extensive work to refine estimates of cost for constructing the infrastructure required to regionalize the Auburn area Wastewater Treatment Plant and disposal at the Lincoln Wastewater Treatment and Reclamation Facility (LWWTRF). Additional knowledge gained throughout this investigation has allowed risks associated with design and construction to be better understood resulting in confidence in reducing estimates of cost. As these estimates of cost are refined and hopefully reduced, regionalization becomes more affordable.

State and Federal Regulations for treatment and disposal of wastewater continue to be more and more difficult and costly to satisfy. Wastewater treatment facilities in the foothills of California, like the Auburn area wastewater treatment plants, often discharge to effluent-dominant water bodies. Frequent regulatory changes continue to make wastewater discharge requirements more difficult to meet, especially for small, foothill treatment plants discharging to sensitive waterways. It seems likely that the Placer County Sewer Maintenance District #1 (SMD #1), Wastewater Treatment Plant (Plant 1), and the City of Auburn Wastewater Treatment Plant (AWWTP) will be subject to extensive additional treatment requirements at each discharge permit renewal.

Although a regional wastewater treatment plant will be subject to similar regulatory changes, meeting those requirements at a regional facility is much less burdensome. The LWWTRF has many advantages over smaller foothill facilities including:

- significant land area for additional facilities;
- original construction which easily allows for expansion at reduced costs;
- multiple discharge options which include land disposal, agricultural reuse, recycled water use, and stream discharge; and
- extensive storage to better regulate heavy wintertime flows.

If SMD #1 and AWWTP continue in operation now, the option for regionalization will most likely not be available in the future. As a result, the regulatory requirements placed upon those facilities will only be met by expending the extensive cost to upgrade, revise, or completely rebuild the treatment processes.

The opportunity to develop a regional wastewater system is upon the Auburn area. The PNWA strongly encourages both the Placer County Board of Supervisors and the Auburn City Council to consider regionalization as the preferred approach to achieving compliance with State and Federal wastewater treatment and disposal regulations.

Sincerely,

A handwritten signature in black ink, appearing to read 'Dr. William Kirby', is written over a horizontal line.

Dr. William Kirby
Chair, Placer Nevada Wastewater Authority

ONB:jg

Attachment C

Mid-Western Placer Regional Sewer Engineering Services Request for Proposal

City of Lincoln

November 1, 2010

Project Overview

The City of Lincoln is requesting proposals for engineering services associated with value engineering, cost estimating, design, environmental review, permitting and design services during construction. The initial phase of work will include additional value engineering and cost refinement work associated with the proposed Mid-Western Placer Regional Sewer project conveyance facilities. The Mid-Western Placer Regional Sewer Project as proposed by the City of Lincoln and supported by the Placer-Nevada Wastewater Authority (PNWA) includes all facilities needed to:

1. Convey sewage from the City of Auburn and the SMD#1 wastewater treatment plants to the Lincoln Wastewater Treatment and Reclamation Facility (WWTRF),
2. Treat the sewage from auburn and SMD#1 at the Lincoln WWTRF, and
3. Provide various gravity sewer and reclamation facilities in the City of Lincoln in return for past Lincoln oversizing of facilities for regional use.

The selected engineering firm will be responsible for the successful project delivery under the general direction of the City Engineer. It is anticipated that the City will provide a notice to proceed for the initial value engineering and cost refinement work November 24, 2010 and that the value engineering and cost refinement work will be complete by January 25, 2011. If this phase of work and subsequent negotiations with City of Auburn and Placer County are successful, an agreement amendment and notice to proceed for design, environmental review and permitting are anticipated in March 2011. This second phase would be complete in 12 months followed by 18 months of construction phase services. A project schedule is to be detailed in the proposal and may be negotiated between the City and the selected consultant.

Proposal Instructions

Seven copies of the proposal and one CD containing the proposal in pdf format must be received prior to 3 PM on Monday, November 15, 2010. Please deliver proposals to the attention of Bruce Burnworth at:

*Development Services
City of Lincoln
600 Sixth Street
Lincoln, CA 95648*

Contact Bruce Burnworth at bburnworth@ci.lincoln.us with questions about this RFP or the project in general. To provide a fair opportunity for all proposers, information provided to one will be provided to all proposers. Meetings with proposers will be limited to meetings with all three proposers.

The proposal shall be in the following general format:

1. Proposal by Phase: Provide each of the following for each of the three phases:
 - a. Phase 1: Value Engineering and Cost Refinement
 - b. Phase 2: Design, Environmental Review, Financing, Right of Way, Permitting
 - c. Phase 3: Design Services During Construction
2. Summary: Provide a summary with a general description of the mandatory items for the scope of work as understood by the consultant, and expression of the consultant's interest in the project.
3. Responsible Project Manager and Project Team: List the Principal in charge and a concise statement of the team's qualifications and experience applicable to the project. List the key staff and sub-consultants, if any, which will be assigned to the project. Provide brief statements of the qualification for each key member of the project team. Provide an organization chart and a description about how the team will work together, with the City of Lincoln and with the City of Auburn and Placer County.
4. Statement of Qualifications: Include a list of similar projects completed by members of the project team, with brief narratives that describe these projects and how they relate to the proposed project. Provide one or two recent examples of work products demonstrating the firm's approach and competency in performing work on projects of similar size and scope.
5. Detailed Scope of Work: Provide a detailed scope of work that describes how the consultant proposes to approach and complete the project. The scope of work must address all mandatory items and detail the tasks and milestones for effective implementation of the project. The scope of work must include all necessary equipment, materials, and labor as well as a listing of all assumptions made by task. The successful proposal will clearly address the points listed in

the Selection and Evaluation section below. Include the anticipated level of work assistance and information to be provided by the City of Lincoln, City of Auburn and Placer County. The scope of work needs to facilitate Corps of Engineering consideration of funding at least initial parts of the project (no Corps commitment for full funding).

6. Schedule: Include a proposed schedule for the main elements of the scope of work in MS Project, or similar format. The project schedule should include completion of all pertinent project milestones, whether or not the consultant is to perform that portion of the work. Include a list of all assumptions used in developing the schedule.
7. Consultant Fee: the consultant fee shall be a not to exceed amount for completing all work as described in the scope of work. Attach a current schedule of charges by staff title used to calculate the fee. The schedule will be used as an exhibit in the engineering services contract and will be applied to all work performed under the contract. Staff titles must match those on the firm's schedule of billing rates and must be consistent with references elsewhere within the proposal. The total fee shall include all work required to complete all items identified in the scope of work, including but not limited to, meetings with City personnel, agency presentations, data gathering and reductions, preparation of technical memoranda, site investigations, and report preparation and reproduction.

The project schedule is as follows:

Phase 1: NTP November 24, 2011 - complete January 25, 2011

Phase 2: NTP March 2011 – complete February 2012

Phase 3: NTP March 2012 – complete August 2013

Consultant Fee:

Phase 1: Shall be a not to exceed amount of \$70,000

Phase 2: Provide in a sealed envelop

Phase 3: Provide in a sealed envelop

Due to constraints associated with SRF loans, it may be necessary to limit payments made to the consultant team before construction to approximately \$5.3 million for all services. The proposal should include a description of how the consultant will address this possible constraint.

The City of Lincoln is seeking highly skilled, dedicated and qualified professionals that can work together as a team to deliver this project on time and under budget with hourly rates that do not exceed \$175 per hour.

Available Information

The following items are available for use by the consultant in preparation of the proposal (pdfs in enclosed CD):

1. City of Lincoln Professional Engineering Services Agreement form
2. October 28, 2010 PNWA Packet that includes Brown & Caldwell's 2010 Value Engineering Study
3. Various documents from Placer County primarily regarding the SMD#1 Site
4. Various documents from the City of Auburn (provided separately)
5. Draft City of Lincoln Proposal For Mid-Western Placer Regional Project
6. Draft November 8, 2010 City Council Report
7. Possible alignment options for consideration during design (sketches)
8. Exhibit showing proposed Lincoln gravity sewer main, elimination of lift stations, and wastewater reclamation system.

This information is to be reviewed and used by the consultant to prepare an effective scope of work.

Terms and Conditions

The City intends to use its standard engineering services agreement with the cost to be calculated on a time and materials basis with a not-to-exceed amount. A copy of this contract is attached to this request for proposal; please review it carefully before preparing a proposal for this project. ***Negotiating changes to the terms of this contract will not be allowed.***

The City reserves the right to reject any or all proposals, to waive defects and informalities, and to accept any proposal.

Mandatory Items for Scope of Work

Phase 1: Value Engineering and Cost Refinement. The Phase 1 scope of services will include preparation of a Value Engineering and Cost Refinement Analysis of the Mid-Western Placer Regional Sewer Project Conveyance Facilities. Value engineering includes analysis of all factors that affect the cost of the project over the life of the project. Value engineering of facilities must include analysis of the schedule for design and construction given the unique competitive bidding environment that exists at this time. The minimum goals of the Phase 1 project are:

- Provide further value engineering and cost refinement analysis of the regional sewer conveyance facilities including storage, pumps, force main,

odor control and energy dissipation facilities. Specific areas to analyze further include:

- Further definition of the nature of the rock along the alignment with a focus on impact on construction costs
 - Construction techniques for rock along the alignment and trench design alternatives that may reduce project costs
 - Storage options including using existing structures and minimizing the need for storage through design and operation
 - Alternative pipe material designs to increase competition and lower prices
 - Alignment options that may significantly reduce project costs
 - Phasing of pumps, storage, odor control and other facilities to minimize initial costs yet provide for cost effective expansion
 - Alternative creek crossing techniques that could reduce environmental and permitting requirements and construction costs
 - Options for reducing cost to project of completing Bickford pipe
 - Project estimates that move from budget estimates closer to actual bid pricing
 - Opportunities for cost savings made possible by one agency responsible for entire regional sewer project, design, construction and operation.
- Provide a firm basis of costs for proceeding with design and construction of the facilities within the current advantageous bid environment.
 - Provide confirmation that project facilities can be designed and constructed with minimal environmental effects thereby avoiding lengthy federal environmental or permit approval.
 - Provide confirmation of the overall project schedule.
 - Provide a firm basis for the annual operation and maintenance costs for the conveyance facilities.

The following mandatory items must be included in the scope of work. The proposed scope of work is to be developed by the consultant; however the items listed must be clearly present as project tasks and/or milestones:

- Identify the project activities needed to address each of the project goals.
- Lead an informal value engineering workshop with the Technical Advisory Committee consisting of Placer County, City of Auburn and City of Lincoln.
- Work closely and openly with the City Engineer to complete project tasks
- Prepare a technical memorandum with the results of the value engineering and cost refinement work.
- Prepare two drafts, one internal draft and one administrative draft, and a final technical memo. The internal draft is to be subdivided into smaller sections for regular periodic reviews, rather than submitting the entire document for review all at once.
- Participate in four public agency meetings possibly including PNWA, Placer County, City of Auburn and City of Lincoln.

- Circulate and present the administrative draft to the TAC, receive and prepare responses to any comments.
- Attend regular project meetings with the City Engineer to review consultant's work and progress towards goals. Prepare summaries and action item lists for all meetings.
- Provide a prime contact for the City Engineer. Prime contact to be the main person communicating with the City Engineer and responding to project issues. This communication will include meetings, phone conversations and email communication.
- Provide 10 full color hard copies, one pdf copy, and an electronic copy of the final report. The electronic copy is to be in Word format, and shall include all tables, figures, exhibits, and databases in a format that will allow the City to access and manipulate the original information outside of the document.

Phase 2: Design, Environmental Review, Right of Way, Financing, Permitting. The Phase 2 scope of services will include preparation of plans, specifications and estimates, environmental documentation, right of way documentation, financing documentation, and permit documentation. Phase 2 services will also include working closely with the City Engineer to develop and implement strategies needed to meet project goals. The minimum goals of Phase 2 are:

- Complete all documents and processes necessary for project bidding by February 2012.
- Implement strategies necessary to meet project cost, schedule and quality goals.
- Deliver the project at a capital cost lower than that established by the City of Lincoln (fixed \$/EDU fee for capital facilities)
- Deliver the project so it can be operated at a cost lower than that established by the City of Lincoln (fixed \$/EDU fee for O&M)
- Project components include:
 - Conveyance facilities such as storage, pumps, force main, odor control, control system, energy dissipation
 - Treatment facility expansion at Lincoln's WWTRF
 - City gravity mains, elimination of lift stations, and reclamation.

The following mandatory items must be included in the Phase 2 scope of work. The proposed scope of work is to be developed by the consultant; however the items listed must be clearly present as project tasks and/or milestones.

- Identify the project activities needed to address each of the project goals.
- Participate in monthly Technical Advisory Committee meetings consisting of Placer County, City of Auburn and City of Lincoln.
- Work closely and openly with the City Engineer to complete project tasks

- Lead project criteria meetings to establish criteria that will be used as the basis for completion of Phase 2 including design, environmental, permitting, right of way, financing and operations.
- Prepare various technical memorandums developed out of the project criteria meetings.
- Prepare two drafts for various technical documents, one internal draft and one administrative draft, and a final technical memo. The internal draft is to be subdivided into smaller sections as appropriate for regular periodic reviews, rather than submitting the entire document for review all at once.
- Participate in public agency meetings possibly including PNWA, Placer County, City of Auburn and City of Lincoln.
- Circulate and present administrative drafts to the TAC, receive and prepare responses to any comments.
- Attend regular project meetings with the City Engineer to review consultant's work and progress towards goals. Prepare summaries and action item lists for all meetings.
- Provide a prime contact for the City Engineer. Prime contact to be the main person communicating with the City Engineer and responding to project issues. This communication will include meetings, phone conversations and email communication.
- Provide 10 full color hard copies, one pdf copy, and an electronic copy of final documents. The electronic copy is to be in Word, Excel or AutoCAD format, and shall include all tables, figures, exhibits, databases and drawings in a format that will allow the City to access and manipulate the original information outside of the document.
- Assist limited City staff in selecting, obtaining and implementing project financing.
- Assist limited City staff in developing and implementing strategies needed to complete in a timely manner environmental documentation for the project.
- Assist limited City staff in developing and implementing strategies needed to complete in a timely manner permitting for the project.
- Assist limited City staff in developing and implementing strategies needed to complete in a timely manner right of way acquisition needed for the project.
- Assist the City in monitoring and adjusting the project to meet project goals associated with fixed costs and other contractual obligations.
- City may consider such options as providing office space at City Hall (vacant third floor) so that entire conveyance design team can be located in one location and focused on delivery of the project (not distracted by other clients). The team could be available for working together with environmental and right of way team members, County of Placer, City of Auburn and the City Engineer to quickly resolve issues.
- Provide peer review of project documents by a group not involved in plan preparation and that reports directly to the City Engineer. The peer review could be performed by a separate group within the consultant team or by a

subconsultant reporting directly to the City Engineer. Peer review should include constructability and value engineering to provide better assurance that a quality project can be constructed for less than the fixed price set by the City.

Phase 3: Design, Environmental, Right of Way, Financing, Permitting Services during Construction. The Phase 3 scope of services will include review of bids, shop drawing reviews, participation in construction management meetings, responses to design RFIs, monitoring of project costs, implementation of environmental mitigation, right of way coordination, compliance with financing requirements, and compliance with permit requirements. Construction management and inspection would be provided through a different consultant selection process. Phase 3 services will also include working closely with the City Engineer to develop and implement strategies needed to meet project goals. The minimum goals of Phase 2 are:

- Complete all construction by September 2013.
- Implement strategies necessary to meet project cost, schedule and quality goals.
- Deliver the project a capital cost lower than that established by the City of Lincoln (fixed \$/EDU fee for capital facilities)
- Deliver the project so it can be operated at a cost lower than that established by the City of Lincoln (fixed \$/EDU fee for O&M)

The following mandatory items must be included in the Phase 3 scope of work. The proposed scope of work is to be developed by the consultant; however the items listed must be clearly present as project tasks and/or milestones.

- Identify the project activities needed to address each of the project goals.
- Participate in monthly Technical Advisory Committee meetings consisting of Placer County, City of Auburn and City of Lincoln.
- Work closely and openly with the City Engineer to complete project tasks
- Participate in weekly construction meetings.
- Respond to RFIs as appropriate.
- Participate in public agency meetings possibly including PNWA, Placer County, City of Auburn and City of Lincoln.
- Circulate and present progress reports to the TAC, receive and prepare responses to any comments.
- Attend regular project meetings with the City Engineer to review consultant's work and progress towards goals. Prepare summaries and action item lists for all meetings.
- Provide 10 full color hard copies, one pdf copy, and an electronic copy of final documents. The electronic copy is to be in Word, Excel or AutoCAD format, and shall include all tables, figures, exhibits, databases and

drawings in a format that will allow the City to access and manipulate the original information outside of the document.

- Assist limited City staff in implementing project financing.
- Assist limited City staff in developing and implementing strategies needed to complete in a timely manner environmental mitigation for the project.
- Assist limited City staff in developing and implementing strategies needed to complete in a timely manner compliance with permits for the project.
- Assist limited City staff in developing and implementing strategies needed to complete in a timely manner right of way coordination needed for the project.
- Assist the City in monitoring and adjusting the project to meet project goals associated with fixed costs and other contractual obligations.

Project Management Expectations. The following are minimum project management responsibilities expected of the consultant:

- Effective tracking of schedule and budget;
- Quality assurance and quality control of all deliverables;
- Clear and timely communication with City staff;
- Written, timely responses to requests for information;
- Project meetings with City staff and other entities as determined necessary by the consultant, including preparation of meeting minutes;
- Interviews, site visits, research etc. as necessary to gather technical information
- Public notification and outreach.
- Make effective presentations to public agencies.

Technical Expectations. The following are the minimum expected technical responsibilities of the selected consultant:

- Review of available information from the City, all involved jurisdictions, etc;
- Evaluation of the current technical memorandums.
- Determination of what information needs to be updated, and determination of appropriate sources of information and methods of achieving the project goals.
- Evaluation of applicable State and Federal laws as they apply to the project
- Data manipulation and modeling capabilities consistent with current City methods and goals.
- Technical memoranda and other documentation to support the project
- Preparation of comprehensive professional quality reports
- Documents signed by a registered engineer

Evaluation and Selection

A panel of City staff will be used to select the consultant. Three primary criteria for selection shall be:

1. Consultant's understanding of the project
2. Consultant's approach to achieving project goals
3. Qualifications and experience of the project team specific to this work

The following are additional specific categories that will be evaluated:

1. The consultant's success at addressing project goals in their scope of work (strategic approach to the project).
2. The consultant's understanding of the project outcomes the City is seeking;
3. The consultant's ability to meet the project management, value engineering, cost control and scheduling needs of the City;
4. The project management and technical experience of the consultant's project team;
5. The consultant's success in completing similar projects, in addition to quality and quantity of similar work.

Fees

The proposed fee shall be commensurate with the scope of work and will be considered only after the City has thoroughly considered the stated evaluation criteria. City staff anticipates completion of proposal review and negotiation of an agreement by November 19, 2010, and issuance of a notice to proceed for Phase 1 on November 24, 2010. The City may elect to interview consulting firms after review of proposals. The fees for Phases 2 and 3 will be negotiated prior to the preparation of amendments for Phases 2 and 3. If negotiations with the highest ranked consultant are not successful, the City reserves the right to negotiate with the next highest ranked short listed consultant prior to the beginning of each project phase. Negotiations for Phase 1 will focus on the scope of services based on a not to exceed amount of \$70,000.

Attachments:

- CD containing various documents

Attachment D

Draft of the proposed agreement with the City of Auburn and Placer County

**Agreement Between
County of Placer, City of Lincoln and City of Auburn
Regional Wastewater Conveyance and Treatment Infrastructure**

Whereas, the County of Placer ("County"), City of Lincoln ("Lincoln"), and the City of Auburn ("Auburn"), (collectively known as the "Parties") share an interest in determining the feasibility and cost of constructing regional wastewater conveyance and treatment infrastructure ("Regional Project") which would provide cost effective wastewater treatment services to the residents of the County, Auburn and Lincoln, and

Whereas, in an effort to encourage both the City of Auburn and the County to pursue a Regional Project, the City of Lincoln has advanced the concept described in detail in Exhibit A which includes Lincoln development and ownership of the entire Regional Project infrastructure with certain fixed and variable costs to the County and Auburn, and

Whereas, in order for Lincoln to prepare a final proposal to the County and Auburn for the Regional Project, additional value engineering needs to be completed along with more refined cost estimates for the regional wastewater conveyance system to carry wastewater from the County and Auburn to Lincoln, and

Whereas, Lincoln proposes to select and retain a consultant to perform \$70,000 of additional and necessary value engineering and cost refinement work described as Phase 1 of the Request for Proposal and summarized in Exhibit B, and

Whereas, the City of Auburn and the County believe that the Lincoln proposal has the potential to provide great benefit to their sewer customers, and

Whereas, Lincoln has agreed to administer the consultant work and prepare the final cost proposal utilizing their own staff resources, and

Whereas, the origin of sewage flow from the Auburn area is expected to approximate 60% from Sewer Maintenance District 1 and 40% from Auburn, which provides a fair basis for sharing the cost of performing the additional work, and

Whereas, Lincoln has expended millions of dollars to oversize sewage conveyance and treatment facilities for the Regional Project, and

Whereas, Corps of Engineers grant funds may be available to reimburse part of the funds paid by the County and Auburn.

Now, therefore, the Parties agree as follow:

1. Lincoln will: a) select and retain a consultant to prepare additional and necessary value engineering and cost refinement work associated with the Regional Project conveyance system, b) transmit any draft and final work products from said consultant to Auburn and County, and c) prepare a formal offer to the County and Auburn to design, construct, own and operate the Regional Sewer Project conveyance and treatment facilities. Lincoln will use their best efforts to deliver a formal offer by the end of February 2011.
2. County will pay to Lincoln upon receipt of an invoice a total of \$42,000 as its share of the additional and necessary value engineering and cost refinement work for the Regional Project.
3. Auburn will pay to Lincoln upon receipt of an invoice a total of \$28,000 as its share of the additional and necessary value engineering and cost refinement work for the Regional Project.
4. Lincoln will return to County and Auburn any funds not expended to complete the scope of work.

IN WITNESS WHEREOF, the parties have executed this Agreement on the date(s) shown below:

COUNTY OF PLACER

Approved as to form:

County Counsel

Kirk Uhler,
Chairman, Board of Supervisors
Date: _____

City of Auburn

Approved as to form:

City Attorney

Print Name: _____
Title: _____
Date: _____

City of Lincoln

Approved as to form:

City Attorney

Jim Estep
City Manager

Date: _____

Exhibit A

**City of Lincoln
Conceptual Proposal for Regional Sewer**

1. The City of Lincoln would design, finance and build the entire Regional Project infrastructure, including expansion of the Lincoln Wastewater Treatment and Reclamation Facility (WWRTF), construction of approximately 18 miles of large diameter pipe, decommissioning the two existing treatment plants in the Auburn area, and construction of pump stations and storage ponds.
2. Lincoln would establish separate estimated fixed costs to Auburn and SMD 1 for completion of the project.
3. The estimated fixed cost would include a budget of \$12.2 million in compensation to Lincoln for prior oversizing of various components of its treatment plant and sewer interceptor.
4. If the actual cost of completing the project exceeds the estimated fixed cost by less than the oversizing reimbursement, Lincoln would absorb the excess cost. SMD 1 and Auburn would share in the cost of any overruns that exceed the oversizing reimbursement. If the actual project cost is less than the estimated fixed cost, Lincoln would retain the savings up to an agreed maximum.
5. Lincoln would own and operate the regional infrastructure in perpetuity.
6. Lincoln would establish an initial cost for operating the treatment plant and operating and maintaining the pipelines and pump stations. With the exception of CPI adjustments, they would hold this cost for five years. Beginning in the sixth year, they would adjust the fees as necessary to cover all reasonable costs.
7. Lincoln would establish connection fees as necessary to pay for all future facility expansions.
8. Lincoln will design, build and finance any future permit compliance projects. The cost of these projects will be shared by current and future customers proportionate to their expected use.
9. Lincoln would require Auburn and SMD 1 to make "significant efforts" to reduce Inflow and Infiltration of storm and ground water, and to ensure pre-treatment of industrial discharges.
10. \$4.0 million deposit required to start design needed by March 2011.
11. Auburn and SMD 1 to provide land needed for regional facilities at current treatment plants at no cost to Lincoln. County to provide existing Bickford sewer pipeline to Lincoln at no cost.
12. Lincoln to pay fines imposed on Auburn and SMD 1 if regional facilities are not operational according to the schedule to be included in Lincoln's proposal (currently expected to be the end of 2014).
13. Lincoln would require cooperation of Auburn and County as Lincoln completes design and environmental review, pursues State Revolving Fund loans to finance the project, completes construction and operates the facilities.

Exhibit B

City of Lincoln
Summary of Phase 1 Scope of Work
for Additional and Necessary Value Engineering and Cost Refinement Work
Associated with the Regional Sewer Project Conveyance System

Phase 1: Value Engineering and Cost Refinement. The Phase 1 scope of services will include preparation of a Value Engineering and Cost Refinement Analysis of the Mid-Western Placer Regional Sewer Project Conveyance Facilities. Value engineering includes analysis of all factors that affect the cost of the project over the life of the project. Value engineering of facilities must include analysis of the schedule for design and construction given the unique competitive bidding environment that exists at this time. The minimum goals of the Phase 1 project are:

- Provide further value engineering and cost refinement analysis of the regional sewer conveyance facilities including storage, pumps, force main, odor control and energy dissipation facilities. Specific areas to analyze further include:
 - Further definition of the nature of the rock along the alignment with a focus on impact on construction costs
 - Construction techniques for rock along the alignment and trench design alternatives that may reduce project costs
 - Storage options including using existing structures and minimizing the need for storage through design and operation
 - Alternative pipe material designs to increase competition and lower prices
 - Alignment options that may significantly reduce project costs
 - Phasing of pumps, storage, odor control and other facilities to minimize initial costs yet provide for cost effective expansion
 - Alternative creek crossing techniques that could reduce environmental and permitting requirements and construction costs
 - Options for reducing cost to project of completing Bickford pipe
 - Project estimates that move from budget estimates closer to actual bid pricing
 - Opportunities for cost savings made possible by one agency responsible for entire regional sewer project, design, construction and operation.
- Provide a firm basis of costs for proceeding with design and construction of the facilities within the current advantageous bid environment.

- Provide confirmation that project facilities can be designed and constructed with minimal environmental effects thereby avoiding lengthy federal environmental or permit approval.
- Provide confirmation of the overall project schedule.
- Provide a firm basis for the annual operation and maintenance costs for the conveyance facilities.

The following mandatory items must be included in the scope of work. The proposed scope of work is to be developed by the consultant; however the items listed must be clearly present as project tasks and/or milestones.

- Identify the project activities needed to address each of the project goals.
- Lead an informal value engineering workshop with the Technical Advisory Committee consisting of Placer County, City of Auburn and City of Lincoln.
- Work closely and openly with the City Engineer to compete project tasks
- Prepare a technical memorandum with the results of the value engineering and cost refinement work.
- Prepare two drafts, one internal draft and one administrative draft, and a final technical memo. The internal draft is to be subdivided into smaller sections for regular periodic reviews, rather than submitting the entire document for review all at once.
- Participate in four public agency meetings possibly including PNWA, Placer County, City of Auburn and City of Lincoln.
- Circulate and present the administrative draft to the TAC, receive and prepare responses to any comments.
- Attend regular project meetings with the City Engineer to review consultant's work and progress towards goals. Prepare summaries and action item lists for all meetings.
- Provide a prime contact for the City Engineer. Prime contact to be the main person communicating with the City Engineer and responding to project issues. This communication will include meetings, phone conversations and email communication.
- Provide 10 full color hard copies, one pdf copy, and an electronic copy of the final report. The electronic copy is to be in Word format, and shall include all tables, figures, exhibits, and databases in a format that will allow the City to access and manipulate the original information outside of the document.

Attachment E

Draft of Professional Services Agreement



PROFESSIONAL SERVICES AGREEMENT DRAFT

THIS AGREEMENT is made at Lincoln, California, as of November 19, 2010, by and between the CITY OF LINCOLN, a municipal corporation ("City") and INSERT NAME/COMPANY/ADDRESS, a California corporation ("Consultant"), who agree as follows:

- 1) Services. Subject to the terms and conditions set forth in this Agreement, Consultant shall provide said services described in Exhibit A. Consultant shall provide said services at the time, place, and in the manner specified in Exhibit A.
- 2) Contract Period. Contract work will begin November 24, 2010 and continue through March 30, 2011.
- 3) Payment. City shall pay to Consultant for services rendered pursuant to this Agreement at the times and in the manner set forth in Exhibit B. The payments specified in Exhibit B shall be the only payments to be made to Consultant for services rendered pursuant to this Agreement. Consultant shall submit all billings for said services to City in the manner specified in Exhibit B; or, if no manner be specified in Exhibit B, then according to the usual and customary procedures and practices which Consultant uses for billing clients similar to City.
- 4) Facilities, Equipment, and Other Materials. Except as set forth in Exhibit C, Consultant shall, at its sole cost and expense, furnish all facilities, equipment, and other materials which may be required for furnishing services pursuant to this Agreement. City shall furnish to Consultant only the facilities, equipment, and other materials listed in Exhibit C according to the terms and conditions set forth in Exhibit C.
- 5) General Provisions. The general provisions set forth in Exhibit D are part of this Agreement. In the event of any inconsistency between said general provisions and any other terms or conditions of this Agreement, the other term or condition shall control insofar as it is inconsistent with the general provisions.
- 6) Exhibits. All exhibits referred to herein are attached hereto and are by this reference incorporated herein.
- 7) Time for Performance. Time is of the essence and subject to City's compliance with Exhibit C. Failure of Consultant to perform any service within the time limits set forth in Exhibit A shall constitute material breach of this Contract.

11/3/2010

600 Sixth Street • Lincoln, CA 95648 • www.ci.lincoln.ca.us • 916.434.2400



Executed as of the day first above stated.

NAME/COMPANY/ADDRESS
a California Corporation

CITY OF LINCOLN,
a municipal corporation

(Authorized Signature)

Jim Estep, City Manager

Dated
and/or

Anna Jatczak, Assistant City Manager/
Chief Financial Officer

Dated

ATTEST:

APPROVED AS TO FORM:

Patricia Avila, City Clerk

Tim Hayes, City Attorney

Dated

Dated

FOR CENTRAL SERVICES DIVISION USE ONLY

CONTRACT NO: _____

ACCOUNT CODE: _____

ENCUMBRANCE: _____

I certify upon my own personal knowledge that budgeted funds are available for the period and the purpose of the expenditure stated above:

Anna Jatczak, Assistant City Manager/
Chief Financial Officer

11/3/2010



EXHIBIT A

SCOPE OF SERVICES

Phase 1 Scope of Work for Additional and Necessary Value Engineering and Cost Refinement Work Associated with the Regional Sewer Project Conveyance System

Phase 1: Value Engineering and Cost Refinement. The Phase 1 scope of services will include preparation of a Value Engineering and Cost Refinement Analysis of the Mid-Western Placer Regional Sewer Project Conveyance Facilities. Value engineering includes analysis of all factors that affect the cost of the project over the life of the project. Value engineering of facilities must include analysis of the schedule for design and construction given the unique competitive bidding environment that exists at this time. The minimum goals of the Phase 1 project are:

- Provide further value engineering and cost refinement analysis of the regional sewer conveyance facilities including storage, pumps, force main, odor control and energy dissipation facilities. Specific areas to analyze further include:
 - Further definition of the nature of the rock along the alignment with a focus on impact on construction costs
 - Construction techniques for rock along the alignment and trench design alternatives that may reduce project costs
 - Storage options including using existing structures and minimizing the need for storage through design and operation
 - Alternative pipe material designs to increase competition and lower prices
 - Alignment options that may significantly reduce project costs
 - Phasing of pumps, storage, odor control and other facilities to minimize initial costs yet provide for cost effective expansion
 - Alternative creek crossing techniques that could reduce environmental and permitting requirements and construction costs
 - Options for reducing cost to project of completing Bickford pipe
 - Project estimates that move from budget estimates closer to actual bid pricing
 - Opportunities for cost savings made possible by one agency responsible for entire regional sewer project, design, construction and operation.
- Provide a firm basis of costs for proceeding with design and construction of the facilities within the current advantageous bid environment.

11/3/2010

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- Provide confirmation that project facilities can be designed and constructed with minimal environmental effects thereby avoiding lengthy federal environmental or permit approval.
- Provide confirmation of the overall project schedule.
- Provide a firm basis for the annual operation and maintenance costs for the conveyance facilities.

The following mandatory items must be included in the scope of work. The proposed scope of work is to be developed by the consultant; however the items listed must be clearly present as project tasks and/or milestones.

- Identify the project activities needed to address each of the project goals.
- Lead an informal value engineering workshop with the Technical Advisory Committee consisting of Placer County, City of Auburn and City of Lincoln.
- Work closely and openly with the City Engineer to complete project tasks
- Prepare a technical memorandum with the results of the value engineering and cost refinement work.
- Prepare two drafts, one internal draft and one administrative draft, and a final technical memo. The internal draft is to be subdivided into smaller sections for regular periodic reviews, rather than submitting the entire document for review all at once.
- Participate in four public agency meetings possibly including PNWA, Placer County, City of Auburn and City of Lincoln.
- Circulate and present the administrative draft to the TAC, receive and prepare responses to any comments.
- Attend regular project meetings with the City Engineer to review consultant's work and progress towards goals. Prepare summaries and action item lists for all meetings.
- Provide a prime contact for the City Engineer. Prime contact to be the main person communicating with the City Engineer and responding to project issues. This communication will include meetings, phone conversations and email communication.
- Provide 10 full color hard copies, one pdf copy, and an electronic copy of the final report. The electronic copy is to be in Word format, and shall include all tables, figures, exhibits, and databases in a format that will allow the City to access and manipulate the original information outside of the document.

Agreement to be amended to include Phases 2 and 3 when approved by the City Council.

11/3/2010



EXHIBIT B

TIME AND MANNER OF PAYMENT

- The cost for undertaking the task(s) addressed in the Scope of Work shall not exceed \$70,000.
- Invoices will be scheduled for payment within thirty (30) working days of receipt by the Administrative Services Department.
- All compensation shall be billed in accordance with the Scope of Work attached as Exhibit A.
- All task(s) outlined in Exhibit A shall be completed no later than 90 days after the execution of this agreement.
- Account Code Number/Account Description for Scope of Work to be charged to:
**#000-0000-0000-0000 -- Wastewater Fund, CIP, Professional Services
(FUNDED BY PLACER COUNTY AND CITY OF AUBURN)**



EXHIBIT C

FACILITIES, EQUIPMENT, AND OTHER MATERIALS

- Consultant shall be responsible for providing all necessary facilities, equipment and personnel to undertake the necessary task(s) outlined in Exhibit A.



EXHIBIT D

GENERAL PROVISIONS

- 1) Independent Contractor. At all times during the term of this Agreement, Consultant shall be an independent contractor and shall not be an employee of City. City shall have the right to control Consultant only insofar as the results of Consultant's services rendered pursuant to this Agreement; however, City shall not have the right to control the means by which consultant accomplishes services rendered pursuant to this Agreement.
- 2) Licenses; Permits; etc. Consultant represents and warrants to City that it has all licenses, permits, qualifications, and approval of whatsoever nature which are legally required for Consultant to practice its profession. Consultant represents and warrants to City that Consultant shall, at its sole cost and expense, keep in effect or obtain at all times during the term of this Agreement any licenses, permits and approvals which are legally required for Consultant to practice its profession at the time the services are performed.
- 3) Time. Consultant shall devote such time to the performance of services pursuant to this Agreement as may be reasonably necessary for satisfactory performance of Consultant's obligations pursuant to this Agreement. Neither party shall be considered in default of this Agreement to the extent performance is prevented or delayed by a cause, present or future, which is beyond the reasonable control of the party.
- 4) Indemnification. Consultant hereby agrees to defend, indemnify and hold harmless the City from and against any and all claims arising out of the willful or negligent acts, errors or omissions of Consultant relating to this Agreement.
- 5) Insurance.
 - (A) General Liability. During the term of this Agreement, Consultant shall maintain in full force and effect a general liability insurance policy in an amount not less than \$1,000,000 combined single limit per occurrence for bodily injury, personal injury and property damage.
 - (B) Automobile Liability. During the term of this Agreement, Consultant shall maintain in full force and effect a policy of automobile liability insurance in an amount not less than \$1,000,000 combined single limit per accident for bodily injury and property damage.
 - (C) Professional Liability. During the term of this Agreement, Consultant shall maintain in full force and effect professional liability insurance for protection against claims alleging negligent acts, errors or omissions which may arise from Consultant's operations under this Agreement, whether such operations be by Consultant or by its employees, subcontractors, or subconsultants. The amount of this insurance shall not be less than \$1,000,000 on a claims-made annual aggregate basis.
 - (D) The City, its officers, officials, employees and volunteers are to be named as additional insured on the Consultant's general liability and automobile liability insurance policies.

11/3/2010



(E) Consultant's general liability and automobile liability insurance coverage shall be primary insurance with respect to the City, its officers, officials, employees and volunteers. Any insurance or self-insurance maintained by the City, its officers, officials, employees or volunteers shall be in excess of Consultant's insurance and shall not contribute with it.

(F) Cancellation. Each insurance policy required in this paragraph shall not be canceled or reduced in coverage or in limits except after thirty (30) days written notice has been received by the City. Current certification of such insurance shall be kept on file with the City Clerk at all times during the term of this Agreement.

- 6) Worker's Compensation. During the term of this Agreement, Consultant shall fully comply with the terms of the law of California concerning Worker's Compensation. Said compliance shall include, but not be limited to, maintaining in full force and effect one or more policies of insurance insuring against any liability Consultant may have for Worker's Compensation. The Worker's Compensation Policy shall contain a waiver by the insurer of all rights of subrogation against the City, its officers, agents and employees.
- 7) Consultant Not Agent. Except as City may specify in writing, Consultant shall have no authority, express or implied, to act on behalf of City in any capacity whatsoever as an agent. Consultant shall have no authority, express or implied, pursuant to this Agreement to bind City to any obligation whatsoever.
- 8) Assignment Prohibited. No party to this Agreement may assign any right or obligation pursuant to this Agreement. Any attempted or purported assignment of any right or obligation pursuant to this Agreement shall be void and of no effect.
- 9) Personnel. Consultant shall assign only competent personnel to perform services pursuant to this Agreement. In the event that City, in its sole discretion, at any time during the term of this Agreement, desires the removal of any person or persons assigned by Consultant to perform services pursuant to this Agreement, Consultant shall remove any such person immediately upon receiving notice from City of the desire of City for the removal of such person or persons.
- 10) Standard of Performance. Consultant shall perform all services required pursuant to this Agreement in the manner and according to the standards observed by a competent practitioner of the profession in which consultant is engaged in the geographical area in which Consultant practices its profession. All products of whatsoever nature which Consultant delivers to City pursuant to this Agreement shall be prepared in a substantial first class and workmanlike manner and conform to the standards or quality normally observed by a person practicing in Consultant's profession.
- 11) City Representative. The City Manager is the representative of the City and will administer this Agreement for the City.
- 12) Termination. City shall have the right to terminate this Agreement at any time by giving notice of such termination to Consultant. In the event City shall give such notice of

11/3/2010



termination, Consultant shall immediately cease rendering services pursuant to this Agreement.

In the event the City shall terminate this Agreement:

(A) Consultant shall deliver copies of all writings prepared by it pursuant to this Agreement. The term "writings" shall be construed to mean and include: handwriting, typewriting, printing, Photostatting, photographings, computer floppy disks, and every other means of recording upon any tangible thing any form of communication or representation, including letters, words, pictures, sounds, or symbols, or combinations thereof.

(B) City shall have full ownership and control of all such writings delivered by Consultant pursuant to this Agreement.

(C) City shall pay Consultant the reasonable value of services rendered by Consultant pursuant to this Agreement; provided, however, that in no event shall any payment hereunder exceed amount of this agreement and further provided, however, City shall not in any manner be liable for lost profits which might have been made by Consultant had Consultant completed the services required by this Agreement. In this regard, Consultant shall furnish to City such financial information as in the judgment of the City Manager is necessary to determine the reasonable value of the services rendered by Consultant. In the event of a dispute as to the reasonable value of the services rendered by Consultant, the decisions of the City Manager shall be final. The foregoing is cumulative and does not affect any right or remedy which City may have in law or equity.

- 13) Non-Discrimination. Consultant shall comply with Section 122(a) of the State and Local Fiscal Assistance Act of 1972.
- 14) Ownership of Information. All professional and technical information developed under this Agreement and all work sheets, reports, and related data shall become the property of City, and Consultant agrees to deliver such documents to City on completion of the services hereunder.
- 15) Attorney's Fees. If any party to this Agreement commences legal proceedings to enforce any of its terms or for damages for its breach, the prevailing party shall be entitled to recover his reasonable attorney's fees, including those incurred on appeal, if any.
- 16) Entirety of Agreement. This Agreement contains the entire agreement of City and Consultant with respect to the subject matter hereof, and no other agreement, statement, or promise made by any party, or to any employee, officer, or agent of any party, which is not contained in this Agreement shall be binding or valid. No supplement, modification, or amendment of this Agreement shall be binding unless executed by all parties in writing.
- 17) Counterparts. The partners may execute this Agreement in two or more counterparts, which shall, in the aggregate, be signed by all the parties; each counterpart shall be deemed an original instrument as against any party who has signed it.

11/3/2010



- 18) Governing Law. This Agreement is executed and intended to be performed in the State of California, and the laws of that State shall govern its interpretation and effect.
- 19) Successors. This Agreement shall be binding on and inure to the benefit of the respective successors and assigns of the parties, except to the extent of any contrary provision in this Agreement.
- 20) Severability. If any term, provision, covenant, or condition of this Agreement is held by a court of competent jurisdiction to be invalid, void, or unenforceable, the remainder of the Agreement shall remain in full force and effect and shall in no way be affected, impaired, or invalidated.

11/3/2010

**MEMORANDUM
DEPARTMENT OF FACILITY SERVICES
COUNTY OF PLACER**

To: BOARD OF SUPERVISORS

Date: NOVEMBER 23, 2010

From: JD JAMES DURFEE / WILL DICKINSON

**Subject: SMD 1 WASTEWATER TREATMENT PLANT UPGRADE:
AUTHORIZATION TO COMPLETE PROJECT DESIGN**

ACTION REQUESTED/RECOMMENDATION: Authorize staff to complete design of the Sewer Maintenance District 1 (SMD 1) Wastewater Treatment Plant Upgrade Project (Upgrade Project) under a previously approved contract with Owen Psomas Engineering.

BACKGROUND: SMD 1 provides sewer service to approximately 7,900 Equivalent Dwelling Units in the North Auburn area. The SMD 1 Wastewater Treatment Plant (Plant 1), constructed in 1961, uses biological and filtration processes that cannot meet current regulatory standards included in its current discharge permit with the Regional Water Quality Control Board (RWQCB). Compliance schedules that provided the County protection from fines and third party lawsuits expired on March 1, 2010. Staff anticipates fines of approximately \$234,000 per year from now until September 2015, when monthly fines could total \$2,500,000 per year until compliance is achieved.

On May 18, 2010, your Board approved an Agreement with Owen Psomas (Psomas) for final design (\$3,173,700) and construction management (\$4,710,800) of the Upgrade Project; however, your Board requested staff return for further spending authorization prior to progressing beyond \$750,000. On August 10, 2010, your Board authorized an additional \$600,000 to allow continued progress. Psomas has billed nearly \$1,350,000 for design work since May 18, 2010. With this funding they have completed revisions to the Preliminary Design Report, conducted a value engineering study, completed the 30% design documents, and nearly completed the 60% design. Through this process, Psomas has eliminated unnecessary project components and refined the facility layout. Staff now estimates the total cost of the Upgrade Project at \$64.3 million, of which \$2.0 has been spent to date. The remaining project costs total \$62.3 million including all remaining engineering and environmental contracts (already encumbered), administration, and construction costs.

On September 22, 2010, SMD 1 received a new discharge permit and Cease and Desist Order that requires the County to:

- Complete final design and environmental clearance of the Upgrade Project by July 31, 2011;
- Award the construction contract by December 31, 2011; and
- Complete construction by December 31, 2014.

The Upgrade Project is currently on schedule to meet these deadlines. Staff recommends your Board authorize completion of final design for the Upgrade Project, in order to meet the Cease and Desist Order deadlines, minimize the mandatory penalties

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mentioned above, and minimize the risk of incurring discretionary fines or third party lawsuits.

ENVIRONMENTAL CLEARANCE: Authorizing the expenditure of additional design funds does not constitute a Project under the California Environmental Quality Act. Environmental review of the proposed Upgrade Project is being prepared concurrently with the project design.

FISCAL IMPACT: Sufficient funds are available in the SMD 1 Wastewater Treatment Plant Upgrade Capital Project Budget to cover the entire cost of the design tasks in the Agreement (\$3,173,700). Approximately \$1,350,000 has been spent to date.

JD:WD:BZ:LM
CC: COUNTY EXECUTIVE OFFICE

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1 RESOLUTION NO. 11-
2 RESOLUTION EXECUTING A MOU WITH THE CITY OF LINCOLN AND PLACER
3 COUNTY FOR THE REGIONAL WASTEWATER VALUE ENGINEERING STUDY.
4 -----

5 THE CITY COUNCIL OF THE CITY OF AUBURN DOES HEREBY RESOLVE:

6 That the City Council of the City of Auburn does hereby authorize the
7 Director of Public Works to execute the Memorandum of Understanding with
8 Placer County and the City of Lincoln which will also authorize the contribution
9 of \$28,000 to the City of Lincoln for the City of Auburn's share of the Value
10 Engineering study costs.

11 DATED: January 10, 2011

12
13 _____
14 Dr. William Kirby, Mayor

15 ATTEST:

16 _____
17 Joseph G. R. Labrie, City Clerk

18 I, Joseph G. R. Labrie, City Clerk of the City of Auburn, hereby certify
19 that the foregoing resolution was duly passed at a special session meeting of
20 the City Council of the City of Auburn held on the 10th day of January 2011 by
the following vote on roll call:

21 Ayes:

22 Noes:

23 Absent:

24 _____
25 Joseph G. R. Labrie, City Clerk
26
27
28